MEMORANDUM

To: Mike Spear, Regional Director, U.S. Fish & Wildlife Service

From: Tim Quinn, Metropolitan Water District of Southern California

Date: Thursday, June 5, 1997

Re: Ideas for Resolving Delta Smelt Crisis

This memorandum transmits some ideas for resolving current problems surrounding recommendations from the U.S. Fish & Wildlife Service (Service) on export regulations and delta smelt salvage at federal and state pumping facilities.

Current Situation

As you know, this water year has raised numerous difficult operational issues. Flood conditions in the early part of the year caused 1997 to be classified a "wet-year" for regulatory purposes. However, the dry conditions of the past several months have put extreme pressure on water supplies. This unusual situation has increased environmental requirements beyond those that typically would accompany current hydrologic conditions.[1] Apparently, delta smelt distribution this year follows a dry-year pattern, and large numbers have been counted at state and federal export facilities in May and June, further increasing tensions between competing uses.

The CALFED management team recommended a plan to "make up" supplies foregone by exporters to increase environmental flow protections on the San Joaquin River in the spring. Because of unanticipated biological circumstances in the delta, the Service has not agreed to allow implementation of the management team's recommendations. Another serious confrontation between environmental and economic uses of water now confronts us during 1997.

Adaptive Management

Current circumstances underscore the critical need to develop better approaches for adaptive management for both environmental and economic purposes. To be successful, an adaptive management approach must have two key elements: (1) a biological element to reduce stressors in the environment; and (2) an economic element to minimize the costs of environmental protection.

Based on briefings I have received from Metropolitan's technical team, it appears current biological circumstances in the delta may well warrant adaptive measures to protect delta smelt populations. However, the current strategy being pursued by the Service focuses only on the biological elements of an adaptive plan. As a result, the actions recommended by the Service would put water supply operations vital to the state's

[1] For example, allowable May take of smelt in "above-normal" years is 9,769. By contrast, allowable May take in "below-normal" years is 55,277.

economy on a crash course. If implemented with no change, the Service's recommended plan could result in San Luis Reservoir storage levels dropping to alarming levels this summer with corresponding and possibly substantial negative impacts on the California economy.

Unless the Service works to develop an economic element to its adaptive plan, ongoing efforts may result in merely replacing a possible biological crisis with an economic crisis.

Possible Economic Elements for an Adaptive Plan

Before the Service implements an adaptive management plan to protect delta smelt, it should work with project operators and stakeholder interests to develop an economic element for the plan. Unless both biological and economic elements are contained in the plan, it is far from clear it will improve the overall situation. The following additional management tools, among others, should be considered for immediate implementation:

1. **Continuous Real-Time Monitoring.** Increase investment in real-time monitoring to develop continuous data on location of delta smelt populations during forthcoming critical weeks. This action would allow project operators to know immediately when smelt have moved out of "harm's way" and would correspondingly allow immediate reduction to pumping restrictions. Similarly, timely information would be readily available when smelt populations move into harm's way, requiring operational adjustments to avoid unnecessary take.

2. **Conjunctive Management Efforts.** Recently, Metropolitan and Santa Clara Valley Water District agreed to go "off-line," foregoing deliveries to reduce demands on the system during months critical to San Luis Reservoir storage levels. Other contractors likely could provide similar flexibility in exchange for relatively small financial incentives (e.g., $25 per acre-foot). A survey of possible responses from state and federal contractors with access to groundwater storage might be an appropriate next step to pursue this alternative further.

3. **Other Environmental Water Exchanges.** Other agencies may also be willing to adjust operations to create additional adaptability in the system. For example, in recent conversations representatives of the City and County of San Francisco have indicated a willingness to explore sharing resources from its Hetch Hetchy project with State Water Contractors to further reduce demands on San Luis Reservoir and the project pumps during critical times. Such opportunities should be identified and explored as soon as practicable.

4. **South-Of-Delta Environmental Banking.** In the future, arrangements can be made to provide south-of-delta banking of environmental water. Critical situations such as this year's could be averted by keeping dedicated banking accounts south of the delta to facilitate meeting environmental needs in critical periods without extreme water supply impacts. The Service and others should investigate possibilities for these types of arrangements.

The situation at this moment is critical. Federal resources agencies, in particular the Service, must make decisions affecting delta operations and fish protection in the coming weeks. It is imperative that you put a high priority on these additional tools as the Service's decision-making moves forward. Developing economic elements to coincide with biological elements of an adaptive management plan is critical for sustainable protection of delta smelt and other Bay-Delta environmental resources.

cc:

Roger Patterson
Bob Potter